

**WHAT IS CLAIMED IS:**

1           1.       A system for the attenuation of radiation during a Computed  
2 Tomography procedure conducted using a Computed Tomography machine having a  
3 gantry defining an opening, the system comprising:

4                   a shield made of a radiation attenuation material, the shield is  
5 configured to be disposed at least partially in front of the opening defined by the  
6 gantry to reduce radiation exposure during the Computed Tomography procedure.

1           2.       The system of claim 1, wherein the shield is configured to be coupled  
2 to the Computed Tomography machine.

1           3.       The system of claim 2, wherein the shield is configured to be  
2 detachably coupled to the Computed Tomography machine.

1           4.       The system of claim 2, wherein the shield is configured to be coupled  
2 to a front portion of the Computed Tomography machine near the gantry.

1           5.       The system of claim 4, wherein the shield is configured to be coupled  
2 to the front portion of the Computed Tomography machine and a patient table.

1           6.       The system of claim 3, further comprising a fastener provided on the  
2 shield for detachably coupling the shield to the Computed Tomography machine.

1           7.       The system of claim 6, wherein the fastener is a hook and loop  
2 fastener.

1           8.       The system of claim 7, wherein the hook and loop fastener is provided  
2 along a top portion of the shield.

1           9.       The system of claim 6, wherein the fastener is a snap, adhesive,  
2 grommet, or zipper.

1           10.      The system of claim 1, wherein the shield is a solid member that is  
2 disposed at least partially in front of the opening defined by the gantry.

1           11.     The system of claim 1, wherein the shield includes a plurality of flaps  
2     extending in a substantially vertical direction.

1           12.     The system of claim 1, wherein the shield is a curtain having at least  
2     one slit starting at a bottom edge of the shield and extending in a substantially vertical  
3     direction for enabling access to the patient.

1           13.     The system of claim 12, wherein the shield includes a plurality of slits  
2     for enabling access to the patient.

1           14.     The system of claim 1, wherein the shield has a substantially  
2     rectangular shape.

1           15.     The system of claim 1, wherein the shield has a curvilinear edge.

1           16.     The system of claim 15, wherein the shield has a substantially circular  
2     shape.

1           17.     The system of claim 1, wherein the shield is configured to reduce  
2     radiation exposure to a medical personnel near the Computed Tomography machine  
3     during the Computed Tomography procedure

1           18.     The system of claim 1, wherein the shield is configured to reduce  
2     radiation exposure to the patient during the Computed Tomography procedure.

1           19.     A system for the attenuation of radiation during a Computed  
2     Tomography procedure conducted using a Computed Tomography machine, the  
3     system comprising:

4                     a shield made of a radiation attenuation material, the shield is  
5     configured to be positioned between a medical personnel and the Computed  
6     Tomography machine to protect the medical personnel from radiation exposure during  
7     the Computed Tomography procedure.

1           20.     The system of claim 19, wherein the shield is configured to be  
2 positioned near at least one of a patient table and a gantry of the Computed  
3 Tomography machine.

1           21.     The system of claim 19, wherein the shield is configured to be coupled  
2 to at least one of a patient table and a front portion of the Computed Tomography.

1           22.     The system of claim 21, wherein the shield is configured to be coupled  
2 to the patient table along an outer edge of the shield and drape over the side of the  
3 patient table until a bottom portion of the shield is substantially near a floor.

1           23.     The system of claim 21, wherein the shield is coupled to the front  
2 portion of the Computed Tomography machine near a gantry.

1           24.     The system of claim 21, wherein the attenuation material is a flexible  
2 material.

1           25.     The system of claim 24, wherein the shield is dimensioned to be  
2 coupled to both the patient table and the front portion of the Computed Tomography  
3 machine.

1           26.     The system of claim 24, wherein the shield is substantially rectangular  
2 in shape.

1           27.     The system of claim 19, wherein the shield is positionable of both  
2 sides of the patient table.

1           28.     A system for the attenuation of radiation during a procedure that emits  
2 ionizing radiation, the system comprising:

3                     a shield made of a radiation attenuation material, the shield is  
4 configured to be draped over and around substantially all secondary areas of a patient  
5 to protect the secondary areas of the patient from radiation exposure.

1           29.     The system of claim 28, wherein the shield includes a missing portion  
2 that allows a target area to be examined.

1           30.     The system of claim 29, wherein the missing portion is an opening in  
2     the shield.

1           31.     The system of claim 30, wherein the shield includes a fastener for  
2     selectively sealing and exposing the opening.

1           32.     The system of claim 29, wherein the shield is configured to cover at  
2     least a patient's head, neck, back, chest, and groin.

1           33.     The shield of claim 32, wherein the shield is further configured to  
2     cover a patient's arms and legs.

1           34.     The system of claim 28, wherein the system is configured as a  
2     combination of a vest, a skirt, and a helmet.

1           35.     The system of claim 34, wherein the system is configured to expose a  
2     target area on the patient by allowing a portion of the system to be moved out of the  
3     way while the procedure is conducted.

1           36.     The system of claim 28, wherein the system is configured for use with  
2     Computed Tomography procedures.

1           37.     A method of attenuating radiation exposure to a medical personnel  
2     during a Computed Tomography procedure preformed by a Computed Tomography  
3     machine, the method comprising:  
4                 disposing a radiation attenuation material on the Computed  
5     Tomography machine between the medical personnel and the Computed Tomography  
6     machine.

1           38.     The method of claim 37, further comprising disposing the radiation  
2     attenuation material across an opening defined by a gantry of a Computed  
3     Tomography machine.

1           39.     The method of claim 35, further comprising coupling the radiation  
2     attenuation material to a front portion of the Computed Tomography machine.

1           40.     The method of claim 37, further comprising coupling the radiation  
2     material to a patient table.

1           41.     A system for the attenuation of radiation during a Computed  
2     Tomography procedure conducted using a Computed Tomography machine, the  
3     system comprising:  
4                 means for reducing radiation exposure to a medical personnel during  
5     the Computed Tomography procedure,  
6                 wherein the means is coupled to the Computed Tomography machine  
7     and positioned between the Computed Tomography machine and the medical  
8     personnel.